



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,683	12/13/2000	Elic Quzi Koskas	28944/36991	7938

4743 7590 03/01/2005

MARSHALL, GERSTEIN & BORUN LLP  
6300 SEARS TOWER  
233 S. WACKER DRIVE  
CHICAGO, IL 60606

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2161

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/736,683

Applicant(s)

KOSKAS, ELIE QUZI

Examiner

Etienne P LeRoux

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-6, 9-11, 14-30 and 73-110 is/are pending in the application.
- 4a) Of the above claim(s) 31-43 and 64-72 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-6,9 and 10 is/are allowed.
- 6) ☐ Claim(s) 11, 14-30 and 73-110 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claims Status:***

Claims 1, 4-6, 9-11, 14-30 and 73-110 are pending. Claims 2, 3, 7, 8, 12, 13 and 44-63 are cancelled. Claims 31-43 and 64-72 are withdrawn. Claims 1, 4-6, 9 and 10 include allowable subject material. Claims 11, 14-30 and 73-110 are rejected as detailed below.

***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

Instant invention drawn to a method of encoding and combining integer lists in a computer system is allowable for including the following non-obvious improvement over the prior art of record, in conjunction with the remaining claim limitations:

Claims 1, 4-6, 9 and 10:

wherein a coding data container comprising records having respective addresses is provided for storing together the coding data produced from the input lists of said plurality of integer lists, each record of the coding data container having a first field for storing an integer rank related to the pattern, a second field for storing an address value for another record of the data container and a third field for storing a bitmap segment.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 74-76, 91 and 95-97 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 74, 91 and 95 recite “the data representing the position of each integer of the input list within said subset are stored at a corresponding address in the second file.” The normally skilled person would not know how to make and use the invention because “a corresponding address” is not described in the specification in a clear and concise manner.

Claims 75, 76, 96 and 97 are rejected for at least being dependent from a rejected base claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-30, 77-89 and 98-110 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites “wherein  $n \geq 2$  and layer k data containers each having a plurality of records are provided in a computer memory for  $1 \leq k \leq n$ .” The metes and bounds of the claim limitation cannot be determined as it is unclear how k can be less than n. Furthermore, claim 18 recites “whereby a combination of said layer k rank with any position retrievable from the data contained in said first filed determines a layer k-1 rank.” The metes and bounds of the claim limitation cannot be determined as it is unclear what comprises “any position retrievable from the data.” Furthermore, is unclear what is the significance of  $k=0$ .

Claims 19-30 depend from claim 18 and thus are rejected for, at least being dependent from a rejected base claim.

Claim 77 includes language similar to claim 18 and is thus rejected for reasons similar to claim 18.

Claims 78-89 are rejected for at least being dependent from a rejected base claim.

Claim 98 includes language similar to claim 18 and is thus rejected for the same reasons as claim 18.

Claims 99-110 are rejected for, at least being dependent from a rejected base claim.

***Art Rejection Precluded***

Claims 91 and 95-97 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement and claims 18-30, 77-89, 91

Art Unit: 2161

and 98-110 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. The rejections under 35 U.S.C. first paragraph and second paragraph are such that art rejection is not possible.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11, 14-17, 73, 90 and 92-94 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,005,503 issued to Burrows (hereafter Burrows).

Claims 11, 73 and 90:

Burrows discloses:

producing coding data including [Fig 1, 140], for each subset containing at least one integer of the input list [groups of eight bits, Fig 1, D1, D2, col 5, lines 55-60], data representing the position of each integer of the input list within said subset and, at least if said layer is the last coding layer, data representing the position of said subset in the pattern [continuation bit 130, Fig 1, col 6, lines 1-11];

Art Unit: 2161

if said layer is not the last coding layer, forming a further integer list representing the position, in the pattern of said layer, of each subset containing at least one integer of the input list, and providing said further integer list as an input list of the next layer [usually a two byte group, col 5, lines 60-65].

Claim 14:

Burrows discloses wherein the coding data produced for each layer are stored in first and second files having a common addressing, whereby for each subset containing at least one integer of the input list of said layer, the data representing the position of said subset in the pattern are stored in the first file and the data representing the position of each integer of the input list within said subset are stored at a corresponding address in the second file [a file for key words and a file for more common words, Fig. 6, col 10, lines 48-55],

Claims 15 and 92:

Burrows discloses wherein the coding data produced from one integer list input in the first layer are stored in at least one file allocated to said one integer [Fig. 6, col 10, lines 48-55]

Claims 16 and 93:

Burrows discloses wherein the coding data produced from one integer list input in the first layer are stored as at least one record chain in a data container allocated to a plurality of integer lists [data container interpreted as address, col 11, lines 5-15]

Claims 17 and 94:

Art Unit: 2161

Burrows discloses the step of grouping the records of the data container so that the records of each chain have contiguous addresses [inherent in minimizing the delta values, col 5, lines 60-65]

### ***Response to Arguments***

Applicant's arguments filed 23 September, 2004 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment of the claims.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 2161

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (571) 272-4022.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Patent related correspondence can be forwarded via the following FAX number (703) 872-9306

Etienne LeRoux

February 10, 2005

  
SAFET METJAHIC  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100